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Serial No. 10/632,546  
60130-1396; 02MRA0126

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

APPELLANT: Steven R. Miller ART UNIT: 3616  
SERIAL NO.: 10/632,546 EXAMINER: Gooden, Jr., Barry J.  
FILED: 08/01/2003  
FOR: **LATERAL LEAF SPRING WITH INBOARD  
AIR SPRING TRAILER SUSPENSION**

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Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**REPLY BRIEF**

Dear Sir:

Responsive to the Examiner's Answer dated September 20, 2007, please consider the following remarks. The appeal brief fee has already been paid. Any additional fees or credits may be charged or applied to Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds.

**REMARKS**

Appellant respectfully reiterates all of the arguments made in the Appeal Brief and in previous Office Action responses to address the Examiner's Answer. Additional arguments, prepared in response to new issues raised in the Examiner's Answer, are set forth below.

**I. §112 rejections:**

Claims 4 and 7 stand rejected under §112, second paragraph, as being indefinite. The examiner has withdrawn the 35 U.S.C. 112, second paragraph, rejection for claim 8.

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#### **Claim 4**

The examiner argues that the claim language "wherein said lateral leaf air spring includes opposing ends that support said knuckles at second pivotal connections" is unclear. Appellant respectfully disagrees. Further, based on the examiner's comments set forth in Item 3 of the Final Office Action, it is shown that the examiner has a clear understanding of claim 4.

#### **Claim 7**

The examiner argues that the claim language "wherein said at least one valve is associated with each of said air springs with said valves being independently actuatable" is unclear. Appellant respectfully disagrees. Further, based on the examiner's comments set forth in Item 3 of the Final Office Action, it is shown that the examiner has a clear understanding of claim 7.

In the examiner's answer, the examiner states that appellant's brief presents arguments relating to the non-entry of the amendment after final and that this issue relates to petitionable matter and is not appealable subject matter. Appellant is not "appealing" the entry of the amendment. Appellant is merely pointing out that appellant did make an attempt to simplify the issues on appeal, but the examiner refused to enter an amendment that addressed the 35 U.S.C. 112, issues.

As such, appellant respectfully asserts that claims 4 and 7 are fully compliant with 35 U.S.C. 112 and requests that the rejection be withdrawn. However, if the Board finds that the claims do not satisfy 35 U.S.C. 112, appellant is still willing to make the proposed changes set forth in the un-entered amendment.

#### **II. §103 rejections: deGoncourt and Pees**

The examiner argues that the motivation set forth in the Final Office Action is proper based on the teachings of Pees. Appellant respectfully disagrees.

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**Claims 1, 2, 4-7, 9 and 11-14**

First, deGoncourt does not disclose knuckles as claimed. Knuckle is a well-known term of art in vehicle wheel technology. Knuckles are inherently steerable structures for wheels on a vehicle axle. The structures set forth in deGoncourt are not knuckles, and one of ordinary skill in the art would not consider these structures as corresponding to the claimed knuckles.

Second, the Examiner has argued that the motivation to modify deGoncourt with the elements of Pees would be "to provide optimized vehicle body isolation and damping of both the body and wheel axle at their natural frequencies." Examiner's Answer, page 4, lines 17-19. This motivation is improper and not supported by the teachings of the references.

When it is necessary to select elements from different references in order to form the claimed invention, there must be some suggestion or motivation to make the selection. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. The extent to which such suggestion must be explicit in, or referred from, the references, is decided on the facts of each application in light of the prior art and its relationship to the claimed invention. It is impermissible to engage in a hindsight reconstruction of the claimed invention, using appellant's structure as a template and selecting elements from the references to fill the gaps. The references themselves must provide some teaching whereby applicant's combination would have been obvious. In re Gorman, 933 F.2d 982, 986, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991).

The base reference (deGoncourt) teaches a conventional hydraulic shock absorber. In order for the Examiner to provide a motivation in support of a prima facie case of obviousness, the Examiner must identify a teaching that would suggest to one of ordinary skill in the art that a conventional hydraulic shock absorber such as that of deGoncourt should be replaced with an air spring such as that taught by Pees. That is, the Examiner must establish that the teachings of the references as a whole would indicate that the Pees' air spring has some benefit over the hydraulic shock absorber configuration that is described as being beneficial in deGoncourt. The Examiner has not provided sufficient motivation to support the proposed modification.

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The examiner argues that there is motivation to replace the shock absorber of deGoncourt with the air spring of Pees referencing col. 2, lines 34-37 of Pees. However, this section of Pees makes no comparison of air springs to shock absorbers, and certainly does not indicate that the air spring of Pees is better than a shock absorber such as that of deGoncourt.

The examiner has pointed to no teaching in Pees of any particular benefit to using the Pees' air spring configuration in place of the deGoncourt shock absorber other than a generalized assertion of optimizing vehicle body isolation and damping of both the body and wheel axle at their natural frequencies. As discussed in detail in the Appeal Brief, deGoncourt does not in any way suggest that its hydraulic shock absorber is somehow deficient with respect to natural frequencies. Further, the teachings in Pees related to the aforementioned optimization have nothing to do with shock absorbers, and as such, one of ordinary skill in the art would not look to the benefits identified in Pees as being applicable to the shock absorber of deGoncourt. In addition, there is nothing in deGoncourt that would have led one of ordinary skill in the art to believe that deGoncourt's hydraulic shock configuration was in any way deficient for deGoncourt's purposes or was in need of modification, especially as one of the benefits of deGoncourt's shock absorber is that it is adaptable to various different mounting configuration as shown in Figures 3-5. One of ordinary skill in the art would have found no reason, suggestion, or incentive for attempting to combine these references so as to arrive at the subject matter of claim 1 other than through the luxury of hindsight accorded one who first viewed appellant's disclosure.

Thus, the rejection of claims 1, 2, 4-7, 9 and 11-14 is improper and must be withdrawn.

#### **Claims 8 and 15**

In addition to the reasons set forth above with regard to claim 1, claims 8 and 15 are also allowable over deGoncourt and Pees as neither reference teaches a rotatable knuckle.

The examiner maintains that deGoncourt discloses knuckles and that the term "steerable" in the appellants' arguments is not commensurate with the scope of the claims. Appellant respectfully disagrees. Knuckles are inherently steerable. Knuckle is a well-known term of art in vehicle wheel technology. The structures set forth in deGoncourt are not knuckles and one of

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ordinary skill in the art would not consider these structures as corresponding to the claimed knuckles. Thus, claims 8 and 15 are allowable over the recited combination.

### III. §103 rejections: Young and Merkle

Young and Merkle do not suggest the claimed features when taking the teachings as a whole.

#### Claims 1-4 and 9-11

First, Young does not disclose knuckles as claimed. Knuckle is a well-known term of art in vehicle wheel technology. Knuckles are inherently steerable structures for wheels on a vehicle axle. The structures set forth in deGoncourt are not knuckles, and one of ordinary skill in the art would not consider these structures as corresponding to the claimed knuckles.

Second, the examiner argues the motivation to modify Young would be "to provide a simpler construction, improved force transmission, reliable and inexpensive to manufacture spring support." Examiner's Answer page 5, lines 22 through Page 6, line 2. The motivation argued by the Examiner is improper for reasons similar to those discussed above relative to Pees. That is, the Merkle air spring is an improvement over prior art air springs such as the one described in German Patent No. 1021733 referenced in the Merkle Background. Statements in Merkle relating to the simpler construction, improved force transmission, etc. in no way relate to conventional hydraulic dampers.

The examiner argues that there is motivation to replace the shock absorber of Young with the air spring of Merkle referring to Figure 3; however there is no teaching in Merkle relating to a comparison of air springs to shock absorbers. Further, there is nothing in Merkle to indicate an air spring is better than a shock absorber.

The examiner has pointed to no specific teaching in Merkle of any particular benefit to an air spring to replace a shock absorber other than a generalized assertion of providing simpler construction, an improved force transmission, and reliable and inexpensive manufacturability. As discussed in detail in the Appeal Brief, Young does not in any way suggest that its shock absorber is somehow deficient in any of these areas. Further, the teachings in do not indicate that shock absorbers should be replaced by air springs, and as such, one of ordinary skill in the

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art would not look to Merkle as teaching replacement of a shock absorber. In addition, there is nothing in Young that would have led one of ordinary skill in the art to believe that Young's shock configuration was in any way deficient for Young's purposes or was in need of modification. One of ordinary skill in the art would have found no reason, suggestion, or incentive for attempting to combine these references so as to arrive at the subject matter of claim 1 other than through the luxury of hindsight accorded one who first viewed appellant's disclosure.

Thus, the rejection of claims 1-4 and 9-11 is improper and must be withdrawn.

#### **Claims 8 and 15**

In addition to the reasons set forth above with regard to claim 1, claims 8 and 15 are also allowable over Young and Merkle as neither reference teaches a rotatable steerable knuckle.

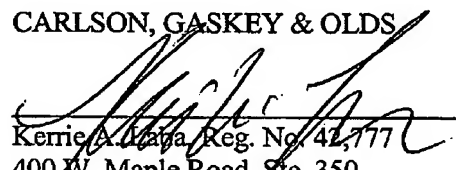
The examiner maintains that Young discloses knuckles and that the term "steerable" in the appellants' arguments is not commensurate with the scope of the claims. Appellant respectfully disagrees. Knuckles are inherently steerable. Knuckle is a well-known term of art in vehicle wheel technology. The structures set forth in Young are not knuckles and one of ordinary skill in the art would never consider these structures as corresponding to the claimed knuckles. Thus, claims 8 and 15 are allowable over the recited combination.

#### **CONCLUSION**

For the reasons set forth above and in the Appeal Brief, the rejection of all claims is improper and should be reversed.

Respectfully submitted,

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CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, fax number (571) 273-8300, on November 19, 2007.

  
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Laura Combs